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## Small Game Shooting and Conservation in Northern India—with some Observations on the Bombay Wild Animals and Wild Birds Protection Act 1951<sup>1</sup>

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Until quite recently there existed on either side of the Delhi-Alwar road, between Sohna and Firozpur Jhirka, a series of large jheels which provided a winter home for scores of thousands of all sorts of waterfowl. This is the land of the Meos in the Gurgaon District of the Punjab and is overlooked throughout its length by the Kala Pahar, one of the northward-thrusting spurs of the Aravali Range. In a good monsoon this stony ridge drains itself in profusion on to the plain below. To control this capricious flow of water in the interests of cultivation Government constructed a system of long, low bunds over a wide area and after the monsoon the result was a chain of large, shallow jheels, sprouting with vegetation and teeming with aquatic life which formed a paradise for all sorts of water birds. Here one could see at one time or another during a winter season practically the whole range of Indian waders from the several kinds of Stork, and even occasionally a flight of Flamingoes, to diminutive Stints and Sandpipers. Swimming birds of course were also fully

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<sup>1</sup> The comments of Mr. Humayun Abdulali, the Society's representative on the Indian Board for Wild Life and on the State Wild Life Board, who is also an Honorary Game Warden for Bombay State, are given in square brackets in the body of the article.

represented from Pelicans to Dabchicks with a regular galaxy of intermediate species.

Naturally, what is a water birds' paradise is also a happy hunting ground for the duck-shooting man. These particular jheels together with the huge and historic permanent jheel between Gurgaon and Najafgarh formed the core of the plan to control duck shooting in the District on an organised basis when the late F. L. Brayne was Deputy Commissioner of Gurgaon just over thirty years ago. Unfortunately, it was a plan, which, though temporarily successful, did not outlast its originator. More recently, in the years just before and after the last war these jheels still provided all that the naturalist and shooting-man could hope for. They were then but lightly shot-over and for the casual shooting party, without the advantage of elaborate preparation, afforded both exacting and stimulating sport. Here during the course of a winter season one could count on seeing practically all the species of migratory duck and teal which visit India, including the occasional rarity. In addition, both species of wild goose were regular visitors, the Greylag often in hundreds when the conditions for them were right.

The writer's game book, which covers about 16 years of this period shows 14 species of migratory duck and teal, as well as 5 indigenous species. The number of birds which found their way into the bag was of course only an infinitesimal proportion of those seen, for the shooting parties did not exceed 4 guns as a rule and usually shot for the first four or five hours or so of daylight and that only once a week on an average. In fact it was one of the most satisfying features of this type of shooting that while enjoying excellent sport one appeared to make no real impression on the quarry which seemed to exist in just as great numbers at the end of the season as at the beginning. At times the duck and teal were concentrated in almost incredible numbers and the concerted roar of their wings when they rose to the first shot of the day was a sound that will not easily be forgotten. The greatest concentrations were usually to be seen during the migration assemblies at each end of the season. But between times there was a remarkable change in the appearance of the birds, for by the end of February in the New Year the dowdy eclipse plumage of the previous autumn had given place to immaculate and colourful breeding dress.

Most interesting were the fluctuations in numbers of the various species from time to time over the years. For example in the late 1930's this area seemed to be only on the fringe of the Mallard's range: they were seldom seen and even less seldom bagged. Ten years later the position was very different and Mallard were not only

seen regularly in appreciable numbers but quite often formed a sizeable part of the bag. It is difficult to account for this. Similarly, the commonest of the four pochards was formerly the White-eye: more recently their abundance has definitely declined and there has been a noticeable increase in the once rare Tufted Pochard. Most pleasing of all has been the recent increase in the numbers of Spotbill, once rather uncommon in these parts. But where they breed is something of a puzzle in view of the vast increase in human population, cultivation and land reclamation all over this area in the last 10 years or so. One hopes they will continue to keep it a secret.

The proportion of species one to another in the bag by no means reflected their relative abundance at large. One of the commonest duck to be seen on the big jheels, and one of the most conspicuous, was the Pintail, but their wariness makes them difficult to circumvent and they figure sparsely in the records. Similarly Wigeon were nearly always to be seen in fair numbers but are so well able to look after themselves that their appearance in the bag was only occasional. With such an abundance and variety one could always hope for making contact with a real rarity. Twice during this period the occurrence of Bronzecapped Teal was definitely established by birds in the hand. A little more often Marbled Duck were obtained, but their status is difficult to assess accurately owing to their retiring habits. Most prized quarry of all were, as ever, the geese, particularly the Greylag, whose wiliness in the face of pursuit is proverbial, as also should be their excellence as table birds. But a careful study of them reveals that they too are creatures of fixed habits. If careful note were taken of them, a keen and experienced shooting man could reckon on bringing one or two of them to bag in a day with fair regularity during the season. Each such occasion makes an indelible mark on the memory for no one can get too old or sophisticated to experience a thrill on bagging a Greylag Goose by his own efforts.

Today the course of the non-stop air service from Bombay to Delhi lies right over this stretch of country. The eye that knows it intimately from the ground can trace the lay-out with ease from the air and see that all of these Mewat jheels are in a normal year now drained and put under the plough. From the standpoint of the national economy this is a good thing and in step with the march of time. No one, except the ultra-reactionary, can complain if the shooting man's loss is the farmer's gain. But from the aspect of wild life conservation one has to consider what adjustments may be necessary in the face of such developments. For this is not a local trend. With the continual demand for progressive expansion in food production it is likely to be country-wide. This means that with the

draining of marsh lands the best feeding grounds for waterfowl will be obliterated and the vast numbers of migratory and indigenous waterfowl, both game birds and otherwise, will have a much restricted choice of winter feeding grounds. They will not often be able to select the safest and most remote as hitherto. They will, assuming that the migratory birds continue to come to this country in the same numbers as before, have to exist in denser concentration than ever if they are to live on their feeding grounds. They will consequently be more vulnerable, especially now that firearms seem to be licensed more freely and widely than hitherto and shooting or netting appears to be practised incessantly, ubiquitously, and with little restraint. Already one hears reports of the growing scarcity of waterfowl in their former haunts. This may be due in part to migrants going elsewhere in which case they are lost to this country all together. Or in part it may be due to a change of habits in that they are only visiting their feeding grounds, where they are most vulnerable, during the hours of darkness. In that case, to the extent that they are game birds, there is a loss to sport and to the supplementary food supply. In either case the situation gives the sportsman naturalist, who cannot but be a conservationist at heart, serious cause for thought. For while it is true that vast areas are being inundated by the new dam projects under the Five Year Plan, the water of these is for the most part too deep to provide a living for large numbers of surface feeding waterfowl.

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The country within a radius of about 60 miles from Delhi lying within the Gurgaon and Rohtak Districts of the Punjab and the Meerut and Bulandshahr Districts of the U.P. provides an admirably suitable habitat for partridges both Black and Grey. It provides an ideal blend of intensely cultivated, well irrigated farm land with scrub-covered, lightly forested wastes or tracts of thick reeds and pampas grass of the Jamuna Kadir country. This combines the abundant and varied food supply afforded by intensive agriculture and the requisite amount of permanent shelter for safety and nesting purposes provided by the waste land. Country like this can support a very large, though not necessarily evenly distributed, partridge population, which undisturbed by man can maintain itself despite losses from weather conditions and natural enemies. But when there is unrestrained interference from man, the balance is very soon upset even under favourable conditions of habitat such as those described above. The fluctuating effects spread over a long period of years make an interesting and instructive study.



Our predecessors tell us that in the 1920's and before a good partridge shoot was to be had within sight of the Kutub Minar or almost anywhere in the adjoining districts of the U.P. or Punjab within a short tonga drive of Delhi. The march of time has put its foot firmly on that and no wonder, when the growth of New Delhi provided a large market for the professional trapper and the development of motor car travel increased the mobility of the shooting man. Inroads on the partridge population were heavy and not always with respect to seasons or a sporting sense of restraint.

The Black Partridge, being somewhat of a fool so far as self preservation is concerned and also the better eating bird, suffered most and by the early 1930's its status had sunk so low that its killing or capture was totally prohibited in the Gurgaon District. The Grey Partridge, though by nature better able to look after itself, was also heavily reduced in numbers and became scarce even in some of its favourite haunts. Since it has the additional disadvantages of being a popular cage bird and of announcing its presence with irrepressible regularity, it is far from being proof against the wiles of professional netters.

With the outbreak of war things changed for the better fortuitously. Petrol was rationed reducing mobility, the cost of cartridges increased in inverse proportion to their availability, shooting men were pre-occupied with grimmer things. It was surprising how quickly the partridge population reacted to these favourable conditions reinforced by wise administrative action on the part of the Punjab Government. In the early 1940's it was possible, within sight of a large town and just off a trunk road not 40 miles from Delhi, to see both species as numerous as they must have been 20 years or so before.

By the time the war ended proper protective legislation had been enforced in the Punjab, which with continued petrol rationing and cartridge scarcity sustained the position for a few years. But as soon as war-time conditions receded into the background and with the population of greater Delhi increasing by leaps and bounds, there was a progressive worsening. Lax administration of the law did not help matters. But more recently the law has been tightened up, particularly as regards netting, and the early 1950's onwards have seen a definite though patchy improvement. Now it is understood that the offering of partridges for sale in Delhi has been made illegal at all times and if this is so a still further improvement is assured, for this checks by far the biggest drain on the stock.

All this should provide some useful lessons for shooting men, for shooting undoubtedly played a part in depleting the partridge stock over the years under review in this area. Partridge shooting in this

sort of country is done almost entirely on cultivated land when the birds are in search of food in the growing Rabi crops and are not difficult to flush. In well irrigated tracts, which goes for most of this area, the sugar cane patches are the favourite resort. These are relatively small in extent and can be easily covered by two guns: if well beaten out and with reasonable marksmanship a high proportion of birds seen is brought to bag. A mustard crop is a greater magnet still, especially when running to seed. Here again the patches are small, the concentration of birds sometimes surprisingly large, and the shooting easier.

Seeing that there is no artificial replenishment of stock it seems fairly clear that if the stock level is to be properly maintained some special self-imposed restraint should be practised over and above strict observation of the law, which in this case now imposes a limit per gun daily. There are certain self-imposed rules which can achieve the object in view as the writer can vouch from actual experience. The experience in question is drawn from a week's shooting from camp over a certain tract of well favoured partridge grounds twice, two seasons apart, each time with the same number of guns. On the first occasion observing the law and the self-imposed rules a very satisfactory bag was obtained in four outings. On the second occasion with the same methods and the same number of outings over exactly the same ground there was as good, if not a better, showing of birds and a bag obtained up to the legal limit. On each occasion sufficient birds were left behind to replenish the stock in the normal way.

The self-imposed rules referred to were as follows:

- (1) The same ground was not shot over twice in a season,
- (2) The number of guns was never more than 3 and they were spaced in such a way that no bird which went straight away could come under fire from more than 1 gun,
- (3) The line of draw was pre-determined and any bird which flew out of the area to be drawn (unless known to be wounded) was allowed to go unmolested.

In addition it is felt that, in view of the nesting habits of the three commonest Indian partridges of the plains, the open season should be confined to the four months from November to February inclusive, regardless of what the law may say.

[In the Bombay Act a comprehensive Close Season from 1st April to 31st September is laid down for all small game, partly because of lack of exact information regarding the breeding seasons of the different species but mainly to simplify administration. As very few

of the officers concerned would be able to tell the different species apart, it was thought that this differentiation on paper would be useless.

The overall close season is, however, not altogether satisfactory. A little beyond Poona we shot Grey and Painted Partridge on the same day (15th February) when the former had unshelled eggs in the oviduct and the latter showed no signs of breeding. Sandgrouse shot on the same day were also in breeding condition. It is evident that the Close Season for the Grey Partridge and Sandgrouse should commence about the 15th of February if not earlier.]

The foregoing gives an idea of how the interference of man, whether deliberate or not, can affect quickly and drastically the status of birds, mainly game birds, of widely differing habits and environment, both indigenous and migratory. It emphasises the need for intelligent conservation both by law and by the voluntary self-restraint of shooting men. In the Bombay State we are fortunate in that comprehensive legislation has been enacted through the Wild Animals and Wild Birds Protection Act (No. XXIV) of 1951 and its rules. But legislation, however well drafted, by itself is not enough. Its effective implementation is of course essential if it is going to get anywhere near the achievement of its objects. For effective implementation it must have been framed with a due regard for the severely practical aspects of the problem. It is, therefore, highly pertinent to consider how the Act stands in this respect.

In the first place it is as well to be quite clear on the precise object which the Act should set out to achieve. The preamble merely states this as 'to make adequate provision for the protection of wild animals and birds . . .'. Why is it found necessary to provide special protection? To answer this the statement of objects might be expanded as follows to explain the need for protection of fauna as:

- (1) to conserve a National Asset but with due regard to the safeguarding of farm crops and livestock, and
- (2) to conserve wild life classed as game for shooting by way of sport in a properly conducted manner or for capture as part of the food supply by humane methods.

[The Bill when first published was accompanied by a Statement of Objects and Reasons and most of these matters were referred to in great detail (*JBNHS* 49: 817). The sentiments expressed of course cannot now affect the interpretation or administration of the Act. But since the Act has to be read by everybody taking out a

licence under it, it is as well that they should have a clear idea of its basic objects and it may be worthwhile publishing the Objects and Reasons along with the Act.]

To reconcile the interests of the farmer with the need for conservation of a national asset is one of the most difficult aspects of the whole problem. The fact has to be faced that herbivorous wild animals cannot be tolerated where crops are grown and carnivorous wild animals must be kept severely in check where livestock is raised. This is provided for in the Act (Section 50) by enabling the 'occupier' (whatever that may mean) of land to protect his agricultural property freely. But is the administration of this Section being conducted properly or is it courting abuse as it can easily do?

[In old Bombay State (1948) the total number of arms licences was 70,000 of which 50,000 were for sport and 20,000 for crop protection. Before the expansion of the State the total number of licences had increased to 1,20,000 of which those for sport remained at 50,000, the rest being for crop protection!]

It is the general consensus of opinion that the only manner in which wild life can be properly protected from the depredations of the farmers is to arrange to recall or seal the guns as soon as the crop is harvested. Sketches showing how all types of guns can be sealed have been circulated, but no action has yet been taken by any State.

It may be worthwhile drawing attention to an unfortunate anomaly whereby Section 38 of the Act, requiring the surrender of animals shot in defence of property, does not cover *female* deer and antelope which are neither 'game' nor 'trophy'.]

There is also provision for classification of certain animals and birds as vermin. Is this really necessary when the interests of cultivators are already safeguarded as above? If it is at all necessary, the list should be a very short one indeed. There are certain inclusions in the existing vermin list which call for immediate comment.

By including all birds of prey and bats there is an invitation to kill some of the best rodent and insect destroyers known to man. Then again it should be remembered that an animal (wild pig for example) may be definitely harmful in a cultivated area and yet not so in a forest area.

[The inclusion of birds of prey and insectivorous bats in the list of 'Vermin' was an unfortunate error, and though nothing has yet been done, the Advisory Board decided on 21st September 1954 that



the wild pig should be removed from this category and be included in both Big and Small game.

Actually, in view of Section 50 of the Act there does not appear to be any need of a separate class of animals to be termed 'Vermin' and its inclusion allows for a lot of poaching in many different forms.]

This latter point raises the question of how the Act under reference ties in with the Forest Act and its Rules (which is understood to have its own provision) for regulating shooting and the capture of birds and animals in the Reserved Forest Areas.

[The Forest Act and its Rules still operate, but the Wild Life Act is comprehensive and refers to both forest and non-forest lands. The shooting of 'Vermin' in forest land without a permit from the Forest Department is now prohibited. For the correct administration of any game laws under Indian conditions it is I think necessary that no distinction be made between forest and non-forest land. Before the Act came into operation it was not possible to take any action against a person driving into town with a Cheetal doe in his car unless it could be proved that it had been shot inside a Reserved Forest! The Forest Rules have not been rescinded and there is a certain amount of duplication of rules with respect to the forest areas.]

There is ample provision in the Act (Chapter IV) for the formation and conduct of 'sanctuaries' for wild life. But what steps have been taken to form any in the seven years since the Act was passed? The only ones that come to mind are those at Taroba in Chanda District (inherited from M.P.), Gir in Kathiawar (inherited from Saurashtra), and the Krishnagiri National Park in Salsette: the last named has little or nothing to offer as at present constituted, though it has distinct possibilities. Surely there are other areas in the Reserved Forests of the new Bombay State which could be made sanctuaries, for cannot the creation of a sanctuary be reconciled with the requirements of forestry?

[The Krishnagiri National Park is admittedly very small (about 12 sq. miles) and its administration has now passed to the Director of the Aarey Milk Colony. A preliminary attempt at the introduction of deer into the Krishnagiri National Park has not been very successful, but Grey Junglefowl released in 1952 have now established themselves and can be heard on any morning. With the closure of shooting on the whole of Salsette Island and with the opening of the new road from the Aarey Milk Colony to Kanheri it is possible that another attempt at the introduction of Sambar and Cheetal may be more successful.

The Dandeli Game Reserve in North Kanara, which was never a national park, covers an area of about 100 sq. miles and did hold a few Bison, Deer, and Elephants. This has now unfortunately gone to Mysore and it is certainly essential that Bombay should look for suitable areas to turn into national parks. Sanctuaries are really not enough as they can be demolished by a stroke of the pen. National parks should be controlled by Acts of Parliament which render them more inviolable.]

A sanctuary in India (Taroba for instance) need not be of anything like the size of its African counterpart for the type and variety of animals, which have to be protected and which incidentally are almost all forest dwellers, differ so widely from those in Africa that the proposition is basically different. A sanctuary where killing or capture is totally prohibited, surrounded by Reserved Forest where there is proper regulation of both should be ideal for the purpose in view. It should not only be easily accessible to the public but properly administered as well, and here is where the provisions of the Act or the implementation of them seem to be lamentably inadequate. For how many officers or servants of the right calibre and training have been appointed to enforce the Act?

[The lack of suitable personnel for the administration of the Act is one of the most difficult problems before us. The number of people who can identify game birds and animals is negligible and so far no attempt appears to have been made to remove this deficiency.

Soon after the Act came into operation there was a report of a man being fined Rs. 5 for shooting an 'Opossum' during the Close Season. As this animal is not known to occur in India, the Society asked for the skin which proved to be that of a Civet Cat and which is listed as Vermin and does not require any licence! In the same area another person shot a Green Pigeon and was apparently able to prove to the Court that it was a bird of prey because it had claws!]

It seems that too much is expected of a single Wild Life Preservation Officer and honorary appointees. It also seems fairly clear that it is in the Reserved Forest areas that almost all India's species of four-footed fauna can and should be conserved. This places the onus on the Forest Department for carrying out the work required and they will obviously need a reinforcement of staff at the right level to do it. Why cannot there be an entirely separate set of rules (administered by the Forest Department) governing shooting and capture in those areas of Reserved Forest which are large enough to be divided into blocks? It is on the border line between Reserved

Forest and cultivated areas that the real clash of interests occurs, so far as big game is concerned, between the interests of cultivators and conservationists. The handling of this situation to maintain a proper balance calls for skilful and authoritative administration for which an adequate executive staff is essential.

[The preamble to the Act referred to earlier reads in part:

‘Recently, so many States have merged in the State of Bombay. This has increased the State-forest area considerably. In view of this it is proposed to appoint an independent officer for seeing that the provisions of the Bill are properly implemented. Forest Officers are fully engaged with their normal work and cannot find time for effectively undertaking this duty.’

In spite of these sentiments the Wild Life Officer works departmentally under the Chief Conservator of Forests and there is very little evidence of his securing any assistance, at least from the junior members of the Forest Department few of whom really understand the details of the Act and its administration.]

There remains the administration of conservation and shooting of small game (birds almost entirely) which applies outside the Reserved Forest for the most part. While the Act provides fairly comprehensively for this on paper it can hardly be said that anything like adequate provision has been made for implementation.

[Within shooting distance of Bombay, the activities of trappers appear to have been controlled, but there is little or no evidence of increase in the number of game birds like partridge and quail. I think an important factor is one to which very little attention has been given in this country, namely Cover. The denudation of the hill-sides and the continued cutting of bushes and shrubs around villages has left no cover which is essential to these birds. Where some years ago two or three guns could make a satisfactory bag of partridge, no birds are now seen. It is apparent as one walks along that the cover which existed is now gone and the small islands of scrub which produced the birds which had run the whole line of the beat no longer exist. Below the Ghats we have only the Painted Partridge which seldom goes out into the open, and the removal of its natural habitat has either reduced its numbers sadly or forced it to live in new places still unlocated.]

There also appears much room for improvement of the classification in the Act under Schedule II (Small Game): for example what are ‘water-birds’ and what water-birds should really be treated as game

birds? What in fact is a game bird or animal? Some attempt at definition seems indicated and the following is suggested:

'A game bird or animal is one which possesses the first and at least one other of the following three attributes:

- (1) It should have adequate means of protecting itself by powers (or combination of powers) such as those of swift movement or concealment or detection or retaliation and the intelligence to use those powers, which make it difficult to circumvent and call for skill, patience and/or endurance in bringing it to bag;
- (2) It should be notably edible;
- (3) It should carry a trophy which is a worthy memento of the chase.'

[The term 'Water-Birds' was used after due consideration to include the 100 odd species of Sandpipers, Stints, Plovers, Curlews, Coot, Moorhens etc., etc., which are all shot at sometime or the other in the best shooting circles. It was thought that this general term with the specific exclusion of Egrets, Herons, and Storks would be sufficient, though it now seems necessary to add a few more like Flamingoes, Ibises, and Cormorants to the list of prohibited species. I do not think that it would be worthwhile attempting to make a list of the water-birds which can or cannot be shot.]

Finally, if people are to be allowed to shoot or capture game lawfully and have to pay for a licence or licences to do so (in addition to an arms licence) they should be given a fair money's worth. They should not be subjected to a complexity of rules, for example forest rules superimposed on Protection Act rules. In short they should be treated with some consideration.

[In spite of several efforts, I have still been unable to persuade Government to arrange to have the game licences issued against payment at the counter. It is true that some persons may be black-listed and licences not issued to them, but no such action has yet been taken and the problem has not yet arisen.

There has been considerable discontent among shikaris over the necessity of obtaining permission to beat in Reserved Forests, particularly as most of the shooting is arranged at short notice when there is no time to obtain permission from the District Forest Officer. At a meeting of the Advisory Board held on 22nd February 1955 it was agreed that permission should be available from the Range Forest Officer and a list of these officers would be attached to game licences. It was also recommended that if the officer was not available, the



applicant had only to make an entry in a book to be retained on the premises and proceed with the beating, though it was open to any forest officer to stop this should he think that this interfered with the work of his department. Unfortunately, there is yet no evidence of any action having been taken in this respect.]

On this basis (to take one instance) the necessity for Section 10, Chapter III of the Protection Act is not clear when it seems that the object of this provision could quite easily be achieved by the arms licensing authority notifying the Wild Life Preservation Officer direct of all licences granted or renewed under the Arms Act. Also both for convenience and information, could not a handy-sized copy of the Protection Act of 1951 (in the appropriate language) be issued automatically along with any licence granted initially under Section 11 of the Act? Licencees have to sign for having read it. [The Act and the Rules thereunder have been published in a handy booklet priced at 5 as.]

The above is mostly concerned with the proper implementation of what is an admirably intentioned piece of legislation. But no amount of effort towards implementation will be really successful unless there is an adequate amount of popular support. To enlist popular support, widespread education (starting with the young) and dissemination of information by every possible publicity medium is indicated. Also, most importantly, it is necessary to allay suspicions, which undoubtedly exist, of wild life conservation and hence game preservation being really designed in the interests of the well-to-do. These aspects of the matter will undoubtedly have to be tackled by private agency. But those who are public spirited enough to make the effort can surely expect to receive adequate Government support.